

# Mapeguard WP System

**ALKALI-RESISTANT WATERPROOFING AND DECOUPLING MEMBRANE UNDER CERAMIC TILES AND NATURAL STONE**

## Products used:

**Mapeguard WP 200, Mapeguard ST, Mapeguard IC, Mapeguard EC, Mapeguard WP Adhesive, Mapeguard PC, Mapeflex MS 45, MAPEI's C2 adhesives according to EN 12004 - ISO 13007**

## DESCRIPTION

**MAPEGUARD WP SYSTEM** is a waterproofing and decoupling membrane composed by a polyethylene layer coated by a non-woven polypropylene fleece laminated on both sides which allows the application of ceramic tiles and natural stones bonded by adhesive.

## WHY USING THE SYSTEM MAPEGUARD WP SYSTEM

is quick and easy to install and provides a waterproof barrier to wet duty areas, where ceramic, porcelain or natural stone tiled finishes are required. The areas are ready for use in a short time, and the easily installed system minimizes potential errors, which may result in leakages.

## WHERE TO USE

**MAPEGUARD WP SYSTEM** is a membrane which can be used as follow:

- bonded waterproof membrane for wet and damp areas, in residential and commercial buildings such as domestic and hotel bathrooms, private or commercial showers, whirls of swimming pools and small size balconies;
- uncoupling membrane under ceramic tiles and natural stone floorings;

- waterproofing membrane on moisture-sensitive substrates (such as gypsum plaster, and gypsum fiber boards, calcium sulphate screeds) and mineral surfaces (such as cement plaster, porous concrete, concrete, cement screed, cement-based panels).

## TECHNICAL SPECIFICATIONS

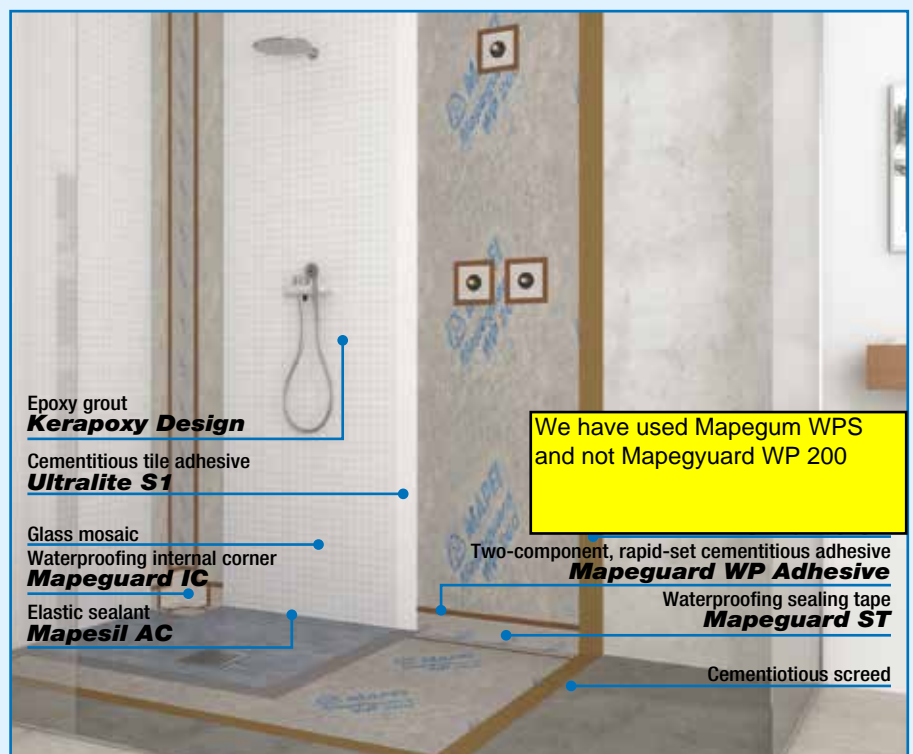
**MAPEGUARD WP SYSTEM** is a waterproofing membrane composed by a polyethylene layer coated by a non-woven polypropylene fleece laminated to both sides.

The polyethylene layer ensures the

waterproofing of the system while the polypropylene fleece ensures a relevant bond strength of the adhesive between the membrane and the substrate and between the membrane and the covering.

**MAPEGUARD WP SYSTEM** is characterized by:

- waterproofing;
- high tensile strength;
- crack bridging ability;
- alkali-resistance;



# Mapeguard WP System

- high adhesion when used together with cementitious tile adhesives.

## ADVANTAGES

- Easy application.
- Fast setting.
- Hygienic.
- Complete system of products.

## Certifications

- ETAG 022.
- AbP (Ü).

## RECOMMENDATIONS

- Do not use **MAPEGUARD WP SYSTEM** if the environmental temperature is lower than +5°C.
- In large areas the use of **MAPEGUARD WP SYSTEM** as a decoupling membrane does not avoid the need of movement joints.
- **MAPEGUARD WP SYSTEM** can not be left exposed, therefore has to be covered by a ceramic or natural stone flooring.
- All the in force national peculiarities and guidelines have to be observed.
- Do not apply any smoothing layer on top of the waterproofing membrane.

## HOW TO APPLY MAPEGUARD WP SYSTEM

### Preparation of the substrate

The substrate must be dry, stable, sound, flat and free from loose particles and other materials, which may inhibit adhesion. Remove all cement laitance, flaking areas and traces of powder, grease, wax, paint etc.

All cracks wider than 0.2 mm must be repaired beforehand with **EPORIP** or **EPORIP TURBO**. Uneven cementitious substrates or ceramic surfaces with wide joints need to be smoothed off and repaired with suitable MAPEI products (please refer to the general catalogue) before laying **MAPEGUARD WP 200**.

Existing floors and those tiled with ceramic, porcelain, klinker or terracotta tiles, etc., must be well bonded to the substrate and be free from substances which could affect the adhesion of the membrane, such as grease, oil, wax, paint, etc. To remove material that could affect the adhesion of the cementitious adhesive, clean the floor with suitable cleaning agents. Gypsum based substrates such as calcium sulphate screeds, plasterboard or gypsum plaster as well as absorbent surfaces made of concrete, aerated concrete, cement mortar and cement render must be primed, before laying **MAPEGUARD WP 200**, with **PRIMER G** or **ECO PRIM T** at the appropriate dilution (refer to the relevant technical data sheet for information). Non-absorbent substrates such as ceramic tiles or natural stone surfaces must be primed with **ECO PRIM T** or **ECO PRIM GRIP**.

### Laying Mapeguard WP 200

**MAPEGUARD WP 200** must be cut to size before being bonded. Use a MAPEI tile adhesive conforming to a minimum of class C2 according to EN 12004 or ISO 13007 such as **KERAQUICK S1 (ULTRALITE S1, KERAFLEX, KERAFLEX MAXI S1** or similar) using a 3x3 or 4x4 mm notched trowel. For application details please refer to the pertinent technical data sheet.

**MAPEGUARD WP 200** must be laid over the fresh adhesive and pressed down uniformly, from the centre to the edges, in order to

avoid trapping air bubbles under the waterproofing membrane. The overlap between **MAPEGUARD WP 200** sheets must be minimum 5 cm wide and must be sealed with **MAPEGUARD WP ADHESIVE** applied with a 3x3 mm notched trowel.

Seal all the junctions between floors and walls and between adjoining sheets with **MAPEGUARD ST** laid directly onto **MAPEGUARD WP 200** with **MAPEGUARD WP ADHESIVE**. Waterproof the internal and external corners with **MAPEGUARD IC** and **MAPEGUARD EC** bonded with **MAPEGUARD WP ADHESIVE** onto the membrane. All pipes must be waterproofed by using the special accessories **MAPEGUARD PC** bonded with **MAPEGUARD WP ADHESIVE** on the membrane. Before installing the membrane around the perimeter of the drain, **MAPEFLEX MS 45** must be applied in order to achieve an adequate seal to the junction.

## LAYING TILES

After the application of the waterproofing membrane, it is possible to proceed directly with the installation of tiles. The choice of the adhesive should be made according to the type and size of the selected ceramic tile or natural stone. After installing the tiles, grout the joints with an epoxy grout (**KERAPOXY CQ, KERAPOXY DESIGN**) or cementitious products (**ULTRACOLOR PLUS, KERACOLOR GG, KERACOLOR FF** mixed with **FUGOLASTIC**). The expansion / movement joints must be sealed with **MAPESIL AC** or **MAPESIL LM**.

**If the system is applied to different surfaces, in climatic conditions and/or for final uses not mentioned above, please contact the Technical Services Department at MAPEI S.p.A.**

## LIST OF PRODUCTS

WE HAVE USED MAPEGUM WPS



**MAPEGUARD ST**

**Waterproofing sealing tape**

3-ply waterproof sealing tape membrane rolls

- Packaging: rolls of 10 m x 12 cm and 30 m x 12 cm

Material	Three layered product made of polypropylene / polyethylene
Colour	Blue
Width	12 cm
Length	30 m – 10 m
Weight (g/m <sup>2</sup> )	Approx. 146-181



**MAPEGUARD IC**

**Internal corner**

- Packaging: box with 25 pieces

Material	Three layered product made of polypropylene / polyethylene
Colour	Blue
Length	11/11/9 cm
Weight (g/m <sup>2</sup> )	Approx. 5



**MAPEGUARD EC**

**External corner**

- Packaging: box with 25 pieces

Material	Three layered product made of polypropylene / polyethylene
Colour	Blue
Length	11/11/9 cm
Weight (g/m <sup>2</sup> )	Approx. 5



**MAPEGUARD PC**

**Elastic gaskets**

Flexible gaskets for waterproofing around pipes, suitable for several pipe-diameters:

- 10-24 mm
- 15-38 mm
- 28-50 mm
- 50-75 mm
- 75-110 mm
- 100-130 mm

- Packaging: box with 25 pieces

**MAPEGUARD WP ADHESIVE**

Two-component, rapid-set elastic cementitious adhesive for bonding and sealing overlaps of MAPEGUARD WP 200 and the relative accessories.

- Packaging: 6.75 kg (component A 3.75 kg + component B 3 kg)



Laying the first sheet of MAPEGUARD WP 200



Application of the second sheet of MAPEGUARD WP 200



Application of MAPEGUARD WP ADHESIVE before MAPEGUARD ST to seal the junctions between two adjoining sheets



Application of MAPEGUARD ST



Preliminary positioning of the membrane in order to evaluate the drainage point



Cutting the membrane



Application of the cementitious tile adhesive



Application of MAPEFLEX MS 45 around the drain



Laying of MAPEGUARD WP 200



# Mapeguard WP System



Unrolling MAPEGUARD WP 200



Press down MAPEGUARD WP 200 onto the drain



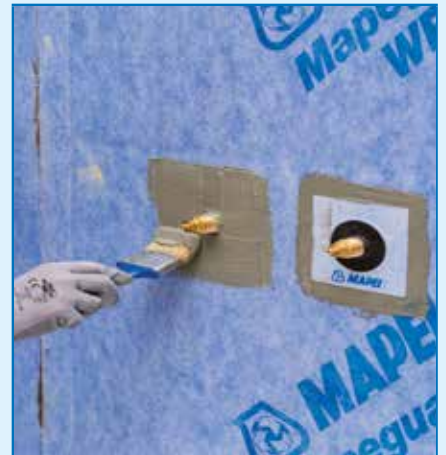
Application of MAPEGUARD WP ADHESIVE before MAPEGUARD ST to seal the junction between two adjoining sheets



Application of MAPEGUARD ST onto MAPEGUARD WP ADHESIVE



Application of MAPEGUARD IC in the internal corner with MAPEGUARD WP ADHESIVE



Application of MAPEGUARD PC with MAPEGUARD WP ADHESIVE



Tile installation with a cementitious tile adhesive



Tile installation



Grouting of the joints



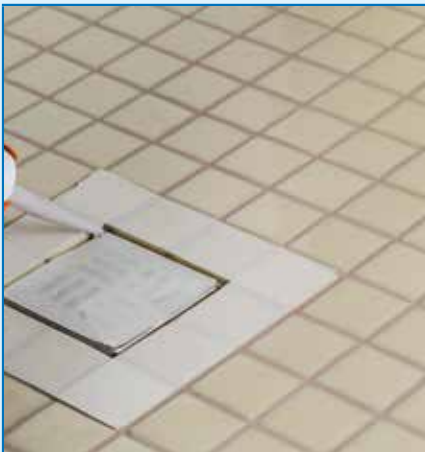
Cleaning off the glass mosaic with a damp Scotch-Brite® pad



Cleaning and finishing the joints with a hard cellulose sponge



Application of the sealant in all corners



Application of the sealant around the drain



Bathroom completely tiled